## Patent claims

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- 1. Device for diagnosing obstructions in channels (8) of a micro heat exchanger (1) with at least one temperature sensor (9) arranged on the outside of the micro heat exchanger (1) and an evaluation unit (10) connected to it, which diagnoses an obstruction on the basis of changes of the measured temperature with unchanged entry parameters of the fluids involved in the heat exchange (4, 7).
- 2. Device for diagnosing obstructions in channels (8) of a micro heat exchanger (1) with at least one temperature sensor (9) arranged on the outside of the micro heat exchanger (1) and a closed-loop control device (11) connected to it, which regulates the mass flow of the fluids (4, 7) involved in the heat exchange in the sense of keeping the measured temperature constant, and diagnoses an obstruction on the basis of changes in the mass flow.
  - 3. Method for diagnosing obstructions in channels (8) of a micro heat exchanger (1), with the temperature being measured at at least one point on the outside of the micro heat exchanger (1) and an obstruction being diagnosed on the basis of changes to the measured temperature with unchanged entry parameters of the fluids (4, 7) involved in the exchange of heat.
- 4. Method for diagnosing obstructions in channels (8) of a micro heat exchanger (1), with the temperature being measured at at least one point on the outside of the micro heat exchanger (1) and the mass flow of one of the fluids involved in the heat exchange (4, 7) being regulated in the sense of keeping the measured temperature constant, with an obstruction being diagnosed on the basis of changes to the mass flow.